

REMARKS/ARGUMENTS

These Remarks are responsive to the Office Action mailed September 10, 2003 ("Office Action") and the interview conducted December 16, 2003 (see, Paper No. 12). Applicant respectfully requests reconsideration of the rejections of claims 1, 2, 5, 12, 15-19, 21, 23 and 26-29 for at least the following reasons.

Applicant's Summary of December 16, 2003 Interview

Applicants thank Examiner Chang for the courtesies extended during the December 16, 2003 interview with the undersigned applicant's representative and inventor Melikian. As reflected in Paper No. 12, inventor Melikian conducted a demonstration of an embodiment of the claimed invention. Applicants also argued that at least the claimed feature of "extracting at least one pattern contour" distinguished the claimed invention from the cited art. Inventor Melikian also explained that other differences between applicants' invention and the cited are include the use of contour curvature information and rotationally invariant features. Examiner Chang indicated that contour curvature information and rotationally invariant features are not explicitly claimed in the independent claims. In addition, Examiner Chang advised applicant to indicate where applicants' specification defines "pattern contour" to indicate how applicants' claimed use of pattern contours distinguishes the invention from the cited art.

Allowable Subject Matter

Applicants thank Examiner Chang for his indication that claims 3-4, 6-11, 13-14, 19, 20, 22 and 24-25 contain allowable subject matter.¹

¹ Office Action, paragraph 11, indicates that claim 1 is objected to as being dependent upon a rejected base claim. Applicants believe this to be a typographical error as claim 1 is independent and rejected in Office Action, paragraph 5.

35 USC § 112 Rejections

By this Response, claims 17 and 19 are amended to correct the lack of antecedent basis indicated by the Examiner. Applicants respectfully submit that the present amendments obviate the asserted rejections and request that the rejections be withdrawn. In addition, Applicants have amended claim 13 to correct a typographical error.

Specification Support For Pattern Contour

The following discussion provides some examples of specification support for the claimed pattern contours. Applicants' specification p. 4, lines 24-25 provide that "[i]n general, contour 104 may be thought of as being an ordered list of edge point coordinates that describe a boundary of a pattern, including both internal and external boundaries." The specification further provides that pattern contours are extracted from pattern images. See, Fig. 4, step 402 and p. 7, lines 10-11.

Pattern contours may be extracted by a number of methods. For example, and extraction engine may be used, edge crawling may be used or other methods for extracting pattern contours may be implemented. See, specification p. 7.

Claim Rejections

Applicants respectfully submit that none of the applied references (Ballard, MacDonald, Yamada or Michael) disclose or suggest Applicants' claimed use of contours. Claim 1 recites "extracting at least one pattern contour from the pattern image," claim 21 recites "extracting scene contour information from a scene image" and claim 26 recites "means for extracting at least one pattern contour from the pattern image." Therefore, Applicants respectfully submit that each independent claim contains at least the above noted feature that is not disclosed or suggested by the cited references, either alone or in combination. For at least this reason, Applicants respectfully request that the rejections be withdrawn.

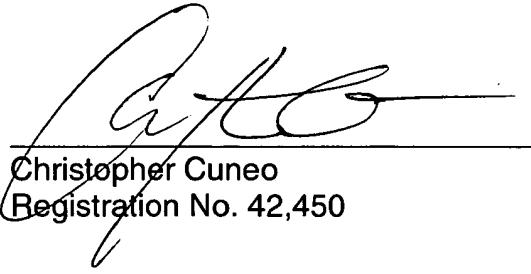
Claims 2, 5, 12, 15-18, 23 and 27-29 depend ultimately from one of claims 1, 21 or 26 and, thus, contain the features recited in the independent claims. For at least this reason, Applicants respectfully submit that the rejections of claims 2, 5, 12, 15-18, 23 and 27-29 are improper and request that they be withdrawn.

A check in the amount of \$55.00 is attached to cover the one (1) month extension of time fee for a small entity. No other fee is believed due at this time. However, in the event any variance exists between the amount enclosed and the Patent Office charges, please charge or credit any difference to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

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Dated: January 12, 2004
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